

TWO NEW SPECIES OF *PTILODACTYLA* (COLEOPTERA: PTILODACTYLIDAE)^{1 2}

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ABSTRACT: Two species of *Ptilodactyla* from Eastern North America are described. Both species, *carinata* n. sp. and *acuta* n. sp., are closely related to *serricollis* (Say) in that the male genital structures are similar. All three species are illustrated and compared.

Since Chapin (1927) studied the North American species of *Ptilodactyla*, it has been considered there are but four species in this genus north of the border with Mexico. We have reviewed the species of this genus and found all four species plus the two species described in this paper which have probably been included under the name *serricollis* as just variations of the male genitalia. These two species are described at this time and compared with *serricollis*.

Ptilodactyla serricollis (Say)

(Figures 1-2, and 7)

Ptilinus serricollis Say 1823, p. 186. Type – lost.

Ptilodactyla serricollis Horn 1880, p. 90; Chapin 1927, p. 242; Spilman 1961, p. 105.

This species is well described by Chapin (1927). The following clarifications can be added:

Tarsal claws of prolegs of male with inner portions of unguis about half length of claw, nearly truncate at apex (Fig. 7).

Median lobe of male penis strongly but asymmetrically widened just before apex (Figs. 1 and 2). Lateral lobes nearly as long as median lobe, setiform.

Material examined: 24♂, 30♀, Lexington, Kentucky, from June 4-Sept. 3, 1969-71, Victor Johnson, at light; 10♂, 1♀, Pike Co., Kentucky, June 15, 1972, Victor Johnson, at light; 1♂, Hot Springs, Arkansas, June 10, 1971, Victor Johnson, at light; 7♂, Savannah, Georgia, from July 20-Sept. 11, 1971, Victor Johnson, at light. All in the University of Kentucky Collection.

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Ptilodactyla carinata n. sp.

(Figures 3-4, and 8)

Closely related to *serricollis* in all aspects except male tarsal claws and the apex of the median lobe of the penis.

Tarsal claws of prolegs of male with inner portions of unguis about half length of claw, median margin notched (Fig. 8).

Male genitalia similar to that of *serricollis*, except median lobe with apex smaller; widened symmetrically near apex (Figs. 3 and 4). Lateral lobes nearly same length as median lobe, setiform.

Note: This species is quite similar to *serricollis* in both size, shape, and color. The male genital structures and tarsal claws are quite different and will easily distinguish it from *serricollis*.

Holotype male and allotype female: Lexington, Kentucky, June 10, 1970, Victor Johnson, blacklight. Paratypes: three males, Lexington, Kentucky, one, June 25, 1969, one, June 28, 1969, one, Sept. 3, 1972, Victor Johnson, blacklight. Holotype and allotype deposited in the U.S. National Museum. Paratypes in the University of Kentucky Collection.

Other material examined: Two males, Fayette Co., Kentucky, June 24, 1970, Chris Sperka; 2♂, 2♀, Hot Springs, Arkansas, June 10, 1971, Victor Johnson, light trap; 2♂, 1♀, Carter Co., Kentucky, June 28, 1976, Victor Johnson, sweeping; 7♂, Savannah, Georgia, from June 18-Sept. 4, 1971-1972, Victor Johnson, blacklight. All in the University of Kentucky Collection.

Ptilodactyla acuta n. sp.

(Figures 5-6, and 9)

Closely related to *serricollis* in all aspects except male tarsal claws and the apex of the median lobe of the penis.

Tarsal claws of prolegs of male with inner portions of unguis about two-thirds length of claw, median margin deeply notched, with apex somewhat truncate (Fig. 9).

Male genitalia similar to that of *serricollis*, except median lobe much smaller in diameter, nearly same size to apex, only slightly widened before apex (Figs. 6 and 6). Lateral lobes nearly same length as median lobe, setiform.

Note: This species is quite similar to *serricollis* in size and color. The male genital structures are distinct and easily distinguished. The tarsal claw is similar to that of *equilobata*, but the male genitalia will easily distinguish it from that species.

Holotype male and allotype female: Savannah, Georgia, October 10, 1971, Victor Johnson, blacklight. Paratypes: 25♂, 25♀, same data as holotype. Holotype, allotype and 10 paratypes deposited in the U.S. National Museum. Other paratypes in the University of Kentucky Collection.

Other material examined: More than 200 specimens from the type locality collected from May 28-Oct. 18, 1971-1972. All in the University of Kentucky Collection.

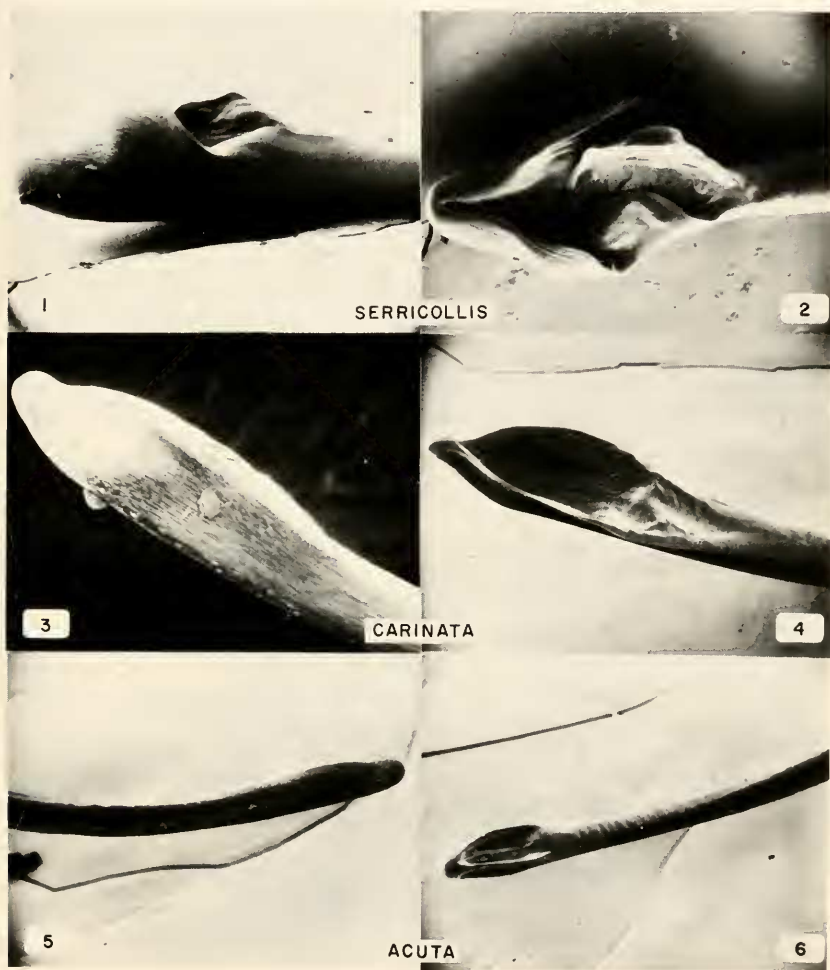
We also have records of *angustata* from Lexington, Kentucky in June, Savannah, Georgia from June to September, and Abingdon, Virginia in July.

LITERATURE CITED

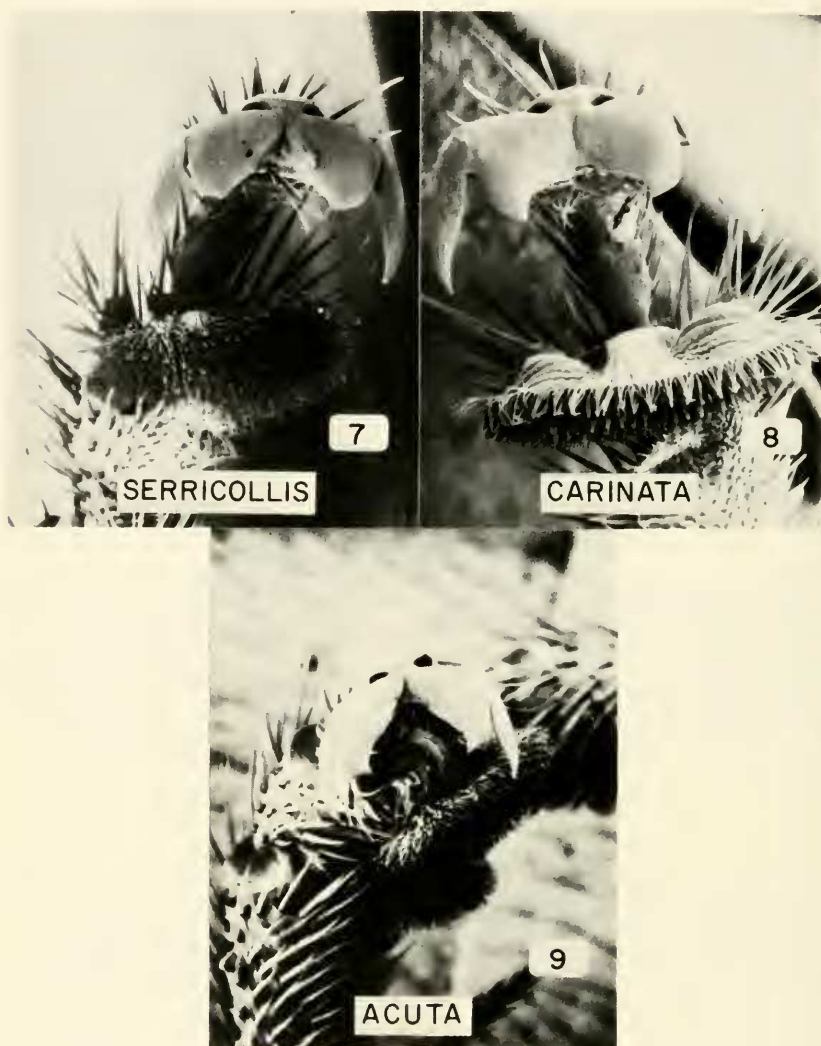
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Figs. 1-6. SEM photographs of apical end of median lobe of male penis. 1. *Ptilodactyla serricollis* (Say), lateral view. 2. *P. serricollis* (Say), dorsal view. 3. *P. carinata* n. sp., lateral view. 4. *P. carinata* n. sp., dorsal view. 5. *P. acuta* n. sp., lateral view. 6. *P. acuta* n. sp. dorsal view. All to same scale (240x).



Figs. 7-9. SEM photographs of prothoracic tarsal claw of male. 7. *Ptilodactyla serricollis* (Say), 8. *P. carinata* n. sp. 9. *P. acuta* n. sp. All approximately to same scale (240x).